

INTERNATIONAL SEARCH REPORT

International application No.

PCT/AU2004/001488

A. CLASSIFICATION OF SUBJECT MATTER		
Int. Cl. ⁷ : A61B 17/00		
According to International Patent Classification (IPC) or to both national classification and IPC		
B. FIELDS SEARCHED		
Minimum documentation searched (classification system followed by classification symbols)		
Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched		
Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)		
DWPI and keywords: blood vessel and wrap and buckle and tension and similar terms		
C. DOCUMENTS CONSIDERED TO BE RELEVANT		
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X A	US 5843170 A (AHN) 1 December 1998 Column 5 lines 38 to 46 and lines 58 to 63	22-24 1
X A	WO 2002/076305 A1 (LANE) 3 October 2002 Page 5 line 21 to page 6 line 12	22-24 1
X A	US 5593414 A (SHIPP et al.) 14 January 1997 Column 2 line 63 to column 3 line 51	21-24 1
X A	US 6226843 B1 (CRAINICH) 8 May 2001 Column 1 lines 34 to 59	21-24 1
<input checked="" type="checkbox"/> Further documents are listed in the continuation of Box C <input checked="" type="checkbox"/> See patent family annex		
<p>* Special categories of cited documents:</p> <p>"A" document defining the general state of the art which is not considered to be of particular relevance</p> <p>"E" earlier application or patent but published on or after the international filing date</p> <p>"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)</p> <p>"O" document referring to an oral disclosure, use, exhibition or other means</p> <p>"P" document published prior to the international filing date but later than the priority date claimed</p> <p>"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention</p> <p>"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone</p> <p>"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art</p> <p>"Z" document member of the same patent family</p>		
Date of the actual completion of the international search 7 December 2004		Date of mailing of the international search report 15 DEC 2004
Name and mailing address of the ISA/AU AUSTRALIAN PATENT OFFICE PO BOX 200, WODEN ACT 2606, AUSTRALIA E-mail address: pct@ipaaustralia.gov.au Facsimile No. (02) 6285 3929		Authorized officer D. Melhuish DAVID MELHUISE Telephone No.: (02) 6283 2426

INTERNATIONAL SEARCH REPORT

International application No.

PCT/AU2004/001488

C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT		
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	WO 1997/040755 A1 (W.L. GORE & ASSOCIATES, INC.) 6 November 1997 Whole document	

INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No.

PCT/AU2004/001488

This Annex lists the known "A" publication level patent family members relating to the patent documents cited in the above-mentioned international search report. The Australian Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

Patent Document Cited in Search Report			Patent Family Member		
US 5843170	AU	35479/95	CA 2198879	EP	0778754
	US	5527355	US 5707378	WO	9607371
	WO	9739687			
WO 02076305	BR	0208329	CA 2440179	EP	1372491
	US	2004133267			
US 5593414	AU	39506/95	AU 71883/98	AU	75689/94
	CA	2147757	CA 2199741	EP	0673229
	EP	0830085	US 5858018	US	5993465
	US	6607540	US 2004097972	WO	9505778
	WO	9610365			
US 6226843	NONE				
WO 9740755	AU	28170/97	CA 2252894	EP	0898463
Due to data integration issues this family listing may not include 10 digit Australian applications filed since May 2001.					
END OF ANNEX					

PATENT COOPERATION TREATY

From the:
INTERNATIONAL SEARCHING AUTHORITY

CORRECTED VERSION
REC'D 28 FEB 2005

To:

PCT WIPO PCT

SPRUSON & FERGUSON
GPO Box 3898
SYDNEY NSW 2001

WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY

(PCT Rule 43bis.1)

Applicant's or agent's file reference
635190C

Date of mailing
(day/month/year)

15-12-04

FOR FURTHER ACTION

See paragraph 2 below

International application No.

PCT/AU2004/001488

International filing date (day/month/year)

28 October 2004

Priority date (day/month/year)

30 October 2003

International Patent Classification (IPC) or both national classification and IPC

Int. Cl. 7 A61B 17/00

Applicant

SUNSHINE HEART COMPANY PTY LTD et al

**CORRECTED
VERSION**

1. This opinion contains indications relating to the following items:

- | | | |
|-------------------------------------|--------------|--|
| <input checked="" type="checkbox"/> | Box No. I | Basis of the opinion |
| <input type="checkbox"/> | Box No. II | Priority |
| <input type="checkbox"/> | Box No. III | Non-establishment of opinion with regard to novelty, inventive step and industrial applicability |
| <input type="checkbox"/> | Box No. IV | Lack of unity of invention |
| <input checked="" type="checkbox"/> | Box No. V | Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement |
| <input type="checkbox"/> | Box No. VI | Certain documents cited |
| <input type="checkbox"/> | Box No. VII | Certain defects in the international application |
| <input type="checkbox"/> | Box No. VIII | Certain observations on the international application |

2. FURTHER ACTION

If a demand for international preliminary examination is made, this opinion will be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA") except that this does not apply where the applicant chooses an Authority other than this one to be the IPEA and the chosen IPEA has notified the International Bureau under Rule 66.1bis(b) that written opinions of this International Searching Authority will not be so considered.

If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of 3 months from the date of mailing of Form PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later.

For further options, see Form PCT/ISA/220.

3. For further details, see notes to Form PCT/ISA/220.

Name and mailing address of the IPEA/AU
AUSTRALIAN PATENT OFFICE
PO BOX 200, WODEN ACT 2606, AUSTRALIA
E-mail address: pct@ipaustralia.gov.au
Facsimile No. (02) 6285 3929

Authorized Officer
D. Melhuish
DAVID MELHUISH
Telephone No. (02) 6283 2426

WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY

International application No.

PCT/AU2004/001488

Box No. I Basis of the opinion

1. With regard to the language, this opinion has been established on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.
☐ This opinion has been established on the basis of a translation from the original language into the following language _____, which is the language of a translation furnished for the purposes of international search (under Rules 12.3 and 23.1(b)).
2. With regard to any nucleotide and/or amino acid sequence disclosed in the international application and necessary to the claimed invention, this opinion has been established on the basis of:
 - a. type of material
☐ a sequence listing
☐ table(s) related to the sequence listing
 - b. format of material
☐ in written format
☐ in computer readable form
 - c. time of filing/furnishing
☐ contained in the international application as filed.
☐ filed together with the international application in computer readable form.
☐ furnished subsequently to this Authority for the purposes of search.
3. ☐ In addition, in the case that more than one version or copy of a sequence listing and/or table relating thereto has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.
4. Additional comments:

**WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY**

International application No.

PCT/AU2004/001488

Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Claims 1 – 21, 23 – 35	YES
	Claims 22	NO
Inventive step (IS)	Claims 1 – 20, 25 – 35	YES
	Claims 21 – 24	NO
Industrial applicability (IA)	Claims 1 – 35	YES
	Claims	NO

2. Citations and explanations:

NOVELTY (N) Claims 22:

D1 – US 5843170 A

D2 – WO 2002/076305 A1

D3 – US 5593414 A

D4 – US 6226843 B1

D1 to D4 each disclose the buckle of claim 22. D1 shows in figure 7 a buckle 44 with two parallel legs between which the end portions of the wrap can pass, and wherein one of the legs is adapted for releasably fixing the wrap via Velcro elements 42a and 42b. Similarly for D2 in which figure 2 shows wrap 1 and buckle 5. D3 and D4 disclose buckles that are capable of securing a wrap around an arterial vessel and comprise a pair of parallel legs through which end portions of the wrap can pass and which releasably fix the wrap.

INVENTIVE STEP (IS) Claims 21 - 24:

Claim 22: As per novelty above.

Claim 21: This claim is not inventive in light of D3 or D4. The standard method of securing a wrap is described at page 1 lines 23 to 25 of the present description, and uses clamps to temporarily hold the wrap. The use of the devices of D3 or D4 to temporarily hold the wrap discloses an apparatus with all the features of claim 21 and is considered non-inventive because D3 and D4 disclose buckles with legs that clamp. Replacing one clamp with another is not considered to be inventive.

Claims 23 and 24: While D1 – D4 do not disclose suturing or stapling the buckle to the wrap, using these methods would readily occur to a person skilled in the art. For example, suturing or stapling the right side of the buckle in figure 7 of D1 would be within the knowledge of a skilled addressee and is therefore non-inventive.